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Peoples Gas Exhibit No. A

Witness _____

Date 10/23/00 Reporter JW

ILLINOIS COMMERCE COMMISSION

Exhibit A

THE PEOPLES GAS LIGHT AND
COKE COMPANY

Petition under Section 5-104 of the Public
Utilities Act for authority to revise
depreciation rates applicable to depreciable
gas plant.

Docket No. 00-

ILLINOIS
COMMERCE COMMISSION
Aug 18 10 52 AM '00
CHIEF CLERK'S OFFICE

DIRECT TESTIMONY OF WILLIAM M. STOUT

- 1 1. Q. Please state your name and business address.
- 2 A. My name is William M. Stout, and my business address is 207 Senate
- 3 Avenue, Camp Hill, Pennsylvania.
- 4 2. Q. By whom are you employed and in what capacity?
- 5 A. I am employed by Gannett Fleming Valuation and Rate Consultants, Inc.,
- 6 as President.
- 7 3. Q. Please describe the firm of Gannett Fleming Valuation and Rate
- 8 Consultants, Inc.
- 9 A. Gannett Fleming Valuation and Rate Consultants, Inc., a subsidiary of
- 10 Gannett Fleming Associates, Inc., provides consulting services to public
- 11 utilities and railroads. The Gannett Fleming affiliated companies employ
- 12 over 1,900 people in 40 offices throughout the United States.
- 13 Gannett Fleming Valuation and Rate Consultants, Inc., and its
- 14 predecessor, the Valuation Division of Gannett Fleming Corddry and

1 Carpenter, Inc., have a long history of client services encompassing
2 valuations; depreciation studies; revenue requirement, cost allocation and
3 rate design studies; analyses of accounting systems; and acquisition and
4 feasibility studies.

5 4. Q. Please state briefly your educational background and employment experi-
6 ence.

7 A. I have a Bachelor of Science degree in Management Engineering from
8 Rensselaer Polytechnic Institute. While attending Rensselaer, I was
9 employed by the Valuation Division of Gannett Fleming Corrdry and
10 Carpenter, Inc., during the summers of 1970, 1971 and 1972. My principal
11 assignments related to valuation studies and computer programming.

12 After my graduation in June 1973, I was employed by the Valuation
13 Division as a Valuation Engineer. The scope of my depreciation activities
14 has included assembly of basic data, statistical service life analyses utilizing
15 the retirement rate and simulated plant record methods, field surveys,
16 preparation of preliminary estimates of service life, calculation of annual
17 and accrued depreciation, and preparation of reports presenting the results
18 of the studies.

19 The scope of my cost of service activities has included the selection
20 of customers to be demand-metered, the analysis of recorded customer
21 demands, the development of cost allocation factors, the allocation of
22 costs, the analysis of customers' consumption, the application of present
23 and proposed rates to the consumption analysis, the design of rate struc-
24 tures, and the preparation of reports presenting the results of the studies.

1 Since January 1978, I have testified in support of the studies
2 conducted under my direct supervision. In January 1980, I was assigned to
3 the position of Manager of Depreciation and Cost Allocation Studies
4 conducted by the Valuation Division. In June 1982, subsequent to a
5 corporate reorganization, I became a Vice President of Gannett Fleming
6 Valuation and Rate Consultants, Inc. I became a Senior Vice President in
7 1991, and attained my current position of President in 1994.

8 5. Q. Are you a registered professional engineer?

9 A. Yes. I am registered in the Commonwealth of Pennsylvania.

10 6. Q. Are you a member of any professional societies?

11 A. Yes, I am a member of the National and Pennsylvania Societies of Profes-
12 sional Engineers, the Institute of Industrial Engineers, the Society of
13 Depreciation Professionals (SDP), the National Association of Water
14 Companies, the American Gas Association (AGA), and the American
15 Water Works Association (AWWA). I am a former member of the Rates &
16 Charges Subcommittee of AWWA, a past president of SDP, and a member
17 of the Accounting Services Committee of AGA.

18 7. Q. Do your professional activities include participation in continuing
19 professional educational programs?

20 A. Yes. I have completed the "Fundamentals of Life Estimation," "Forecasting
21 Service Life," and "Making and Administering [Depreciation] Policy"
22 programs conducted by the Center for Depreciation Studies at Western
23 Michigan University. In 1985 I became a member of the faculty of
24 Depreciation Programs, Inc., lecturing on "Forecasting Service Life,"

1 "Fundamentals of Salvage Analysis", and "Managing a Depreciation
2 Study". I also am an instructor at the annual Introduction to Public Utility
3 Accounting and Advanced Accounting Seminars sponsored by AGA.

4 8. Q. Have you previously testified on the subject of depreciation?

5 A. Yes, I have testified on the subject of depreciation before the Pennsylvania
6 Public Utility Commission, the Georgia Public Service Commission, the
7 Indiana Utility Regulatory Commission, the New York Public Service
8 Commission, the Regulatory Commission of Alaska, the Texas Public Utility
9 Commission, the New Hampshire Public Utilities Commission, the Alberta
10 Energy & Utilities Board, the Newfoundland Board of Commissioners of
11 Public Utilities, the Federal Energy Regulatory Commission, the National
12 Energy Board of Canada, the Canadian Radio-Television and
13 Telecommunications Commission and the United States Tax Court.

14 9. Q. Have you previously testified before the ICC?

15 A. Yes. I testified on the subjects of cost of service allocation and customer
16 rate design on behalf of Illinois-American Water Company in ICC Dockets
17 95-0076 and 97-0102.

18 10. Q. What is the purpose of your testimony?

19 A. The purpose of my testimony is to submit evidence supporting the petition
20 of The Peoples Gas Light and Coke Company (the Company, Peoples or
21 Petitioner) for approval of a change in depreciation rates based on a new
22 average service life study as required by the Illinois Commerce Commission
23 (ICC) in the Company's last rate order, Docket 95-0032, dated November 8,
24 1995.

1 11. Q. What were the ICC's requirements of the Company with respect to
2 depreciation in its order in Docket 95-0032?

3 A. The order required the Company to perform depreciation studies every five
4 years, commencing with the date of the order, and to request Commission
5 approval for any change in depreciation rates in the future. Thus, the
6 Company contracted with Gannett Fleming Valuation and Rate
7 Consultants, Inc. to perform a depreciation study (the Study) to estimate
8 average lives and survivor curves and to determine depreciation rates
9 based on property data as of December 31, 1999, for the type groups and
10 plant accounts of the Company.

11 12. Q. Please describe what you mean by the term "depreciation".

12 A. My use of the term "depreciation" is in accord with the definition set forth in
13 the ICC's Uniform System of Accounts for Gas Utilities. "Depreciation"
14 refers to the loss in service value not restored by current maintenance,
15 incurred in connection with the consumption or prospective retirement of
16 gas plant in the course of service from causes which are known to be in
17 current operation, against which the company is not protected by insurance.
18 Among the causes to be given consideration are wear and tear, decay,
19 action of the elements, inadequacy, obsolescence, changes in the art,
20 changes in demand and requirements of public authorities, and, in the case
21 of natural gas companies, the exhaustion of natural resources.

22 In the Study that I performed and that is the basis for my testimony, I
23 used the straight line remaining life method of depreciation with the average
24 service life procedure. In the remaining life method, the annual

1 depreciation is based on a system of depreciation accounting which aims to
2 distribute the unrecovered cost of fixed capital assets over the estimated
3 remaining useful life of the unit, or group of assets, in a systematic and
4 rational manner.

5 13. Q. Have you prepared an exhibit presenting the results of your depreciation
6 Study?

7 A. Yes. Exhibit No. 1 presents the results of the depreciation Study as of
8 December 31, 1999.

9 14. Q. How did you determine the annual depreciation?

10 A. The determination of annual depreciation consists of two phases. In the
11 first phase, service life characteristics are estimated for each Type Group,
12 that is, each plant account or subaccount identified as having similar char-
13 acteristics. In the second phase, the composite remaining lives and annual
14 depreciation are calculated based on the service life estimates determined
15 in the first phase.

16 15. Q. Please describe the first phase of the Study, that is, the manner in which
17 you estimated the service life characteristics for each Type Group.

18 A. The service life Study consisted of compiling historical data from records
19 related to Peoples' gas plant; analyzing these data to obtain historical
20 trends of survivor characteristics; obtaining supplementary information from
21 management and operating personnel concerning Peoples' practices and
22 plans as they relate to plant operations; and interpreting the above data to
23 form judgments of average service life characteristics.

1 16. Q. What historical data did you analyze for the purpose of estimating the
2 service life characteristics of Peoples' gas plant?

3 A. The data consisted of the entries made by Peoples to record gas plant
4 transactions through December 1999. The transactions included additions,
5 retirements, transfers, and the related balances. The data were classified
6 by depreciable group, type of transaction, the year in which the transaction
7 took place, and the year in which the plant was installed.

8 17. Q. What method did you use to analyze this service life data?

9 A. I used the retirement rate method. That method is the most appropriate
10 when aged retirement data are available, because it develops the average
11 rates of retirement actually experienced during the period of study. Other
12 methods of life analysis infer the rates of retirement based on a selected
13 type survivor curve.

14 18. Q. Please describe the results of your use of the retirement rate method.

15 A. Each retirement rate analysis resulted in a life table which, when plotted,
16 formed an original survivor curve. Each original survivor curve as plotted
17 from the life table represents the average survivor pattern experienced by
18 the several vintage groups during the experience band studied. Inasmuch
19 as this survivor pattern does not necessarily describe the life characteristics
20 of the property group, interpretation of the original curves is required in or-
21 der to use them as valid considerations in service life estimation. Iowa type
22 survivor curves were used in these interpretations.

23 19. Q. Please explain briefly what an "Iowa-type survivor curve" is and how you
24 use it in estimating service life characteristics for each depreciable group.

1 A. The range of survivor characteristics usually experienced by utility and
2 industrial properties is encompassed by a system of generalized survivor
3 curves known as the Iowa-type curves. The Iowa curves were developed
4 at the Iowa State College Engineering Experiment Station through an ex-
5 tensive process of observation and classification of the ages at which in-
6 dustrial property had been retired.

7 Iowa-type curves are used to smooth and extrapolate original
8 survivor curves determined by the retirement rate method. The Iowa
9 curves were used in the Study to describe the forecasted rates of retire-
10 ment based on the observed rates of retirement and the qualitative outlook
11 for future retirements.

12 The estimated survivor curve designations for each Type Group
13 indicate the average service life, the family within the Iowa system and the
14 relative height of the mode. For example, the Iowa 65-R2.5 indicates an
15 average service life of sixty-five years; a Right mode, or R, type curve (the
16 mode occurs to the right of average life for right mode curves); and a me-
17 dium height, 2.5, for the mode (possible modes for R type curves range
18 from 0.5 to 5).

19 20. Q. Did you physically observe Peoples' plant and equipment in the field?

20 A. Yes. A field trip was conducted in order to be familiar with Company
21 operations and to observe representative portions of the plant. A general
22 understanding of the function of plant and information with respect to the
23 reasons for past retirements and the expected future causes of retirements
24 was obtained during my review of Company facilities. This knowledge and

1 information were incorporated in the interpretation and extrapolation of the
2 statistical analyses.

3 21. Q. Please describe the second phase of the Study, the calculation of compos-
4 ite remaining lives and the determination of annual depreciation.

5 A. After I estimated the service life characteristics for each depreciable group,
6 I calculated annual depreciation accrual amounts for each group in accor-
7 dance with the straight line remaining life method, using remaining lives
8 consistent with the average service life procedure.

9 22. Q. Please describe briefly the straight line remaining life method of deprecia-
10 tion that you used for depreciable property.

11 A. The straight line remaining life method of depreciation allocates the original
12 cost less accumulated depreciation in equal amounts to each year of re-
13 maining service life.

14 23. Q. Please describe briefly the average service life procedure.

15 A. In the average service life procedure, the remaining life annual accrual for
16 each vintage is determined by dividing future book accruals (original cost
17 less book reserve) by the average remaining life of the vintage. The aver-
18 age remaining life is a directly weighted average derived from the estimated
19 survivor curve.

20 24. Q. Please outline the contents of Exhibit No. 1.

21 A. Exhibit No. 1 is presented in three parts. Part I. Introduction includes
22 statements related to the scope of and the basis for the depreciation Study.
23 Part II. Methods Used in the Estimation of Depreciation includes descrip-

1 tions of the estimation of survivor curves and the calculation of annual and
2 accrued depreciation.

3 Part III. Results of Study presents a description of the results,
4 summaries of the depreciation calculations, graphs and tables which relate
5 to the service life Study, and the detailed depreciation calculations.

6 The table on pages III-4 through III-8 presents the estimated survivor
7 curve, the original cost at December 31, 1999, and the book reserve and
8 calculated annual depreciation amount and rate for each account or subac-
9 count of gas plant.

10 The section, beginning on page III-9, presents the results of the
11 retirement rate analyses prepared as the historical bases for the service life
12 estimates. The section, beginning on page III-184, presents the calculation
13 of annual depreciation by vintage by account for each classification of gas
14 plant.

15 25. Q. Please illustrate the procedure followed in your depreciation Study and the
16 manner in which it is presented in Exhibit No. 1 using an account as an ex-
17 ample.

18 A. I will use Account 376.1, Mains, to illustrate the manner in which the Study
19 was conducted. Account 376.1, Mains, represents 31 percent of the total
20 plant. As the initial step of the service life Study phase, aged plant ac-
21 counting data were compiled for the years through 1999. These data have
22 been coded in the course of Peoples' normal recordkeeping according to
23 account or property group, type of transaction, year in which the transaction
24 took place, and year in which the gas plant was placed in service. The re-

1 retirements, plant additions and other plant transactions were analyzed by
2 the retirement rate method.

3 For example, for Account 376.1, Mains -- Steel (Type Group 092),
4 the data were subdivided for study into two experience bands, 1939-1999
5 and 1970-1999. These experience bands are of sufficient length to smooth
6 fluctuations in the level of retirements. The resulting life tables are pre-
7 sented on pages III-70 through III-75 of Exhibit No. 1. These two bands, as
8 well as the 65-R2.5 survivor curve, which was selected to represent the av-
9 erage survivor characteristics, are plotted on page III-69. Similar analyses
10 for the remaining Type Groups in the account were conducted and are pre-
11 sented on pages III-51 through III-68.

12 The calculation of the annual depreciation accrual rate, the second
13 phase, for the original cost of mains in service at December 31, 1999, is
14 presented, by vintage, on pages III-221 through III-232 of Exhibit No. 1.
15 The expectancy and average life derived from the survivor curve for each
16 vintage within each Type Group were used to calculate the accrued depre-
17 ciation.

18 The book reserve was allocated to Type Groups and vintages based
19 on the calculated accrued depreciation. The remaining lives of the vintages
20 were based on the respective survivor curve estimates, the Iowa 65-R2.5
21 survivor curve in the case of steel mains, and the attained age. The future
22 book accruals (original cost less allocated book reserve) were divided by
23 the remaining lives to derive the annual depreciation accruals by vintage.

1 26. Q. Is the procedure you described for Account 376.1, Mains – Steel, typical of
2 that followed for most of the plant investment?

3 A. Yes, it is, inasmuch as the straight line method with the average service life
4 procedure was used for all depreciable plant.

5 27. Q. What do you recommend regarding Peoples' implementation of the
6 average lives and survivor curves that you estimated?

7 A. I recommend that the average lives and survivor curves that I have esti-
8 mated be used in the calculation of annual depreciation beginning with
9 Peoples' fiscal year 2001 (October 1, 2000 through September 30, 2001).

10 28. Q. What was the purpose of the calculation of annual depreciation accrual
11 rates as of December 31, 1999?

12 A. The purpose of the December 31, 1999, calculation was to provide Peoples
13 and the ICC with an approximation of the amount of annual depreciation
14 based on the results of the Study.

15 29. Q. What is the annual depreciation based on the results of the Study?

16 A. The annual depreciation based on applicable property balances as of De-
17 cember 31, 1999, is approximately \$55 million per year.

18 30. Q. Will you provide an update of your calculation of annual depreciation as
19 shown in the schedule on pages III-4 through III-8 when September 30,
20 2000, data become available?

21 A. Yes, I will.

22 31. Q. Do you anticipate a materially different result between the Study and
23 updated annual depreciation calculation as of September 30, 2000?

24 A. No, I do not.

1 32. Q. Does that conclude your direct testimony?

2 A. Yes, it does.